ABSTRACT

A first positioning step S1 positions and fixes a light focusing element and a polarization converting element. A beam introducing step S5 introduces beams to a beam splitting element, the light focusing element and the polarization converting element. An optical image forming step S6 detects an optical image through the above elements. An illumination-area comparing step S9 performs an image processing on the detected optical image to compare an illumination area formed by the optical image with a designed illumination area. A beam-splitting-element position-adjusting step S11 adjusts the position of the beam splitting element. An optimal-state determining step S10 determines the optimal state of the illumination area of the optical image with respect to the designed illumination area on the basis of the comparison result. The position of the beam splitting element is adjusted in a beam splitting element position-adjusting step S11 when the beam splitting element is not located in the optimal position. A second positioning step S12 positions and fixes the beam splitting element to the light focusing element and the polarization converting element.